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Weekly Payroll Jobs and Wages in Australia methodology

Reference period Week ending 17 July 2021

Released 5/08/2021

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The following section has been updated in this release:

- Differences to labour force employment statistics: text updates

How data are collected

Source

The Australian Taxation Office (ATO) receives payroll information from businesses with Single Touch Payroll (STP) enabled payroll and accounting software each time the business

runs its payroll. The ATO provides selected business and job level data items from the STP system to the ABS for the production of statistics.

Scope and coverage

The scope and coverage of these estimates are largely defined and constrained by the characteristics of the data sources from which these estimates are produced. As such, users should note that not all jobs and wages in the Australian labour market are captured within these estimates.

Payroll jobs

Payroll jobs as reported to the ATO through STP are in scope of these estimates. All payroll jobholders regardless of age or Australian residency status are included. Persons reported via STP must hold either a Tax File Number (TFN) or an Australian Business Number (ABN).

A payroll job is a relationship between an employee and their employing enterprise, where the employee is paid in the reference week through STP-enabled payroll or accounting software and reported to the ATO. Where an employee is paid other than weekly, the established payment pattern is used to include payroll jobs paid in weeks outside the reference week.

Payroll jobs reported via STP exclude owner managers of unincorporated enterprises.

Employers with 20 or more employees (large employers) commenced transition to STP reporting on 1 July 2018. At the time of this release, almost all large employers are reporting through STP.

Employers with less than 20 employees (small employers) began transitioning to STP on 1 July 2019. Any reporting concessions that were made available for small employers ended on 30 June 2021. At the time of this release, almost all eligible small employers are reporting through STP.

In addition, payroll jobs reported in the Defence Industry (ANZSIC Class 7600) are excluded from these estimates by the ABS to better align with other [Labour estimates](https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/6150.0~Oct%202019~Main%20Features~Australian%20Labour%20Account%20Concepts~4) (<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/6150.0~Oct%202019~Main%20Features~Australian%20Labour%20Account%20Concepts~4>).

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Wages

The STP reported wages associated with each payroll job are in scope of these estimates. Wages are gross amounts, prior to taxation and deductions and include:

- salary payments and allowances,
- labour hire payments and foreign income,
- the value of payments in kind (where a fringe benefit amount is recorded),
- bonuses where they are reported in the same field as normal payments.

The total wages concept broadly aligns with the [Australian System of National Accounts \(https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5216.0Glossary12015?OpenDocument\)](https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/5216.0Glossary12015?OpenDocument) (ASNA) definition of wages and salaries, with the exception of payments to employee's superannuation and severance and termination payments which are excluded.

More specifically, the following STP reported income items are included in the production of wages estimates;

- gross income amount (including bonuses),
- allowance income,
- fringe benefit amount (reportable, taxable),
- fringe benefit amount (reportable, tax exempt),
- other income (not specified),
- foreign income amount including tax exempt income,
- Community Development Employment Project income.

Other data sources

The STP data are enhanced through combining other administrative data held by the ABS (also sourced from the Australian taxation system).

Sex, age and geographic variables are primarily sourced from Client Register data (supplied by ATO to the ABS as part of the transfer of Personal Income Tax data). Sex can only be sourced from Client Register data. When age and geography are not available from Client Register data, they are sourced from STP data. Jobholders whose characteristics cannot be linked or derived (from either Client Register or STP data) are assigned an 'unknown' category. For more information, see the Data components, totals and index calculation section of [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](https://www.abs.gov.au/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions).

Industry of activity and employment size variables of the employing business are sourced from the ABS Business Register (BR). Employer characteristics whose characteristics cannot be linked or derived from ABSBR data are assigned an 'unknown' category.

Further detail on the ATO Client Register and ABSBR are included below.

ATO Client Register

The ATO Client Register is a register of persons that have interacted with the ATO and have been issued with an Australian Tax File Number (TFN). The person-level Client Register contains demographic data such as sex, date of birth and residential address. The ABS receives yearly updates (or snapshots) of the de-identified Client Register from the ATO for use in the production of statistics.

Jobholder characteristics were initially sourced from the mid-2019 snapshot. From the 13 April 2021 release, jobholder characteristics such as date of birth (from which age is derived), sex and geography (including sub-state region) have been updated using the mid-2020 snapshot. These characteristics are held constant over the time series to reduce volatility in fluctuating characteristics.

While date of birth is held constant, the age of jobholders (as derived from date of birth) continues to be updated at the start of a jobholder's birth month each year.

ABS Business Register

The ABS Business Register (BR) is populated using data from the Australian Business Register (ABR) and business data from the Australian Tax Office (ATO). Data on the structures of large and complex businesses are also collected by ABS. The ABSBR is updated regularly and a snapshot, containing business characteristic information, is produced quarterly for use in the production of statistics.

Up until the release of 6 July 2021, a March 2020 snapshot was used to determine industry and employment size in these estimates. In the 6 July 2021 release, the March 2021 snapshot has been used to update employer characteristics back to the week ending 29 August 2020. Once a business' payroll job is allocated to an industry or employment size, it is held constant until the next snapshot when missing values will be populated and existing values refreshed (if they have changed). More information on the latest update of the Business Register snapshot is found in the Update of employer characteristics section of the [Methods review \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review).

Businesses which do not appear on the latest snapshot are assigned an 'unknown' employment size and industry. For more information on unknowns, see the Data components, totals and index calculation section of [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions). The number of STP Payroll jobs which do not have employment size or industry is currently small (around 0.3% of total payroll jobs), and their exclusion is expected to have minimal impact on the industry and employment size

estimates.

How data are processed

To produce estimates from STP data, several processes and treatments are applied.

Calendarisation

The STP data are reported on a cash basis (the time when the payment was made) rather than an accrual basis (the time when the payment was earned). Production of real time estimates require the conversion of STP data from a cash basis to an accrual basis. This is done through a “calendarisation” method. This method breaks down all records to a common period (daily), which allows the data to be aggregated and analysed for any longer period (e.g. weekly).

The calendarisation method includes the following steps:

- calculation of the periodicity (payment frequency) using the start and end date of the payment period,
- calculation of a daily pay rate by dividing the total payments by the payment frequency (for example, weekly pay is divided by seven), and
- an adjustment to the periodicity for a job to exclude the days before commencement (or after termination), where the start or termination date for a job occurs within the payment period.

Accrual of end of financial year payments

Towards the end of the financial year, unadjusted STP data includes higher than usual week-to-week changes in total wages paid. Some employers report lumped fringe benefits tax (FBT) payment amounts for eligible employees at the end of the financial year. This is most evident in the Health care and social assistance industry. To reduce the reporting variability introduced by these payments, the ABS has determined and applied an adjustment factor to accrue reported FBT amounts across the relevant financial year wages series. It is applied to all records which include reportable FBT amounts, not just those in the Health care and social assistance industry.

This adjustment factor has been applied for the 2020-21 financial year, but will be revised at the conclusion of each financial year using business reported data to ensure it remains current. This treatment enhances the existing calendarisation methodology and is consistent with the definition of wages and salaries used in the Australian System of National Accounts. More information about employer reporting of FBT is available from the

ATO website.

This adjustment methodology is not possible for other extraordinary payments (such as bonuses) where they are included with the wages data in the period they are paid. Bonuses are not currently readily distinguishable from the wages component of the STP job level dataset (unlike reportable FBT amounts) and can be paid at any time.

Imputation

In addition to cash reporting, extracted STP payment data for a specific week cycle may be incomplete due to:

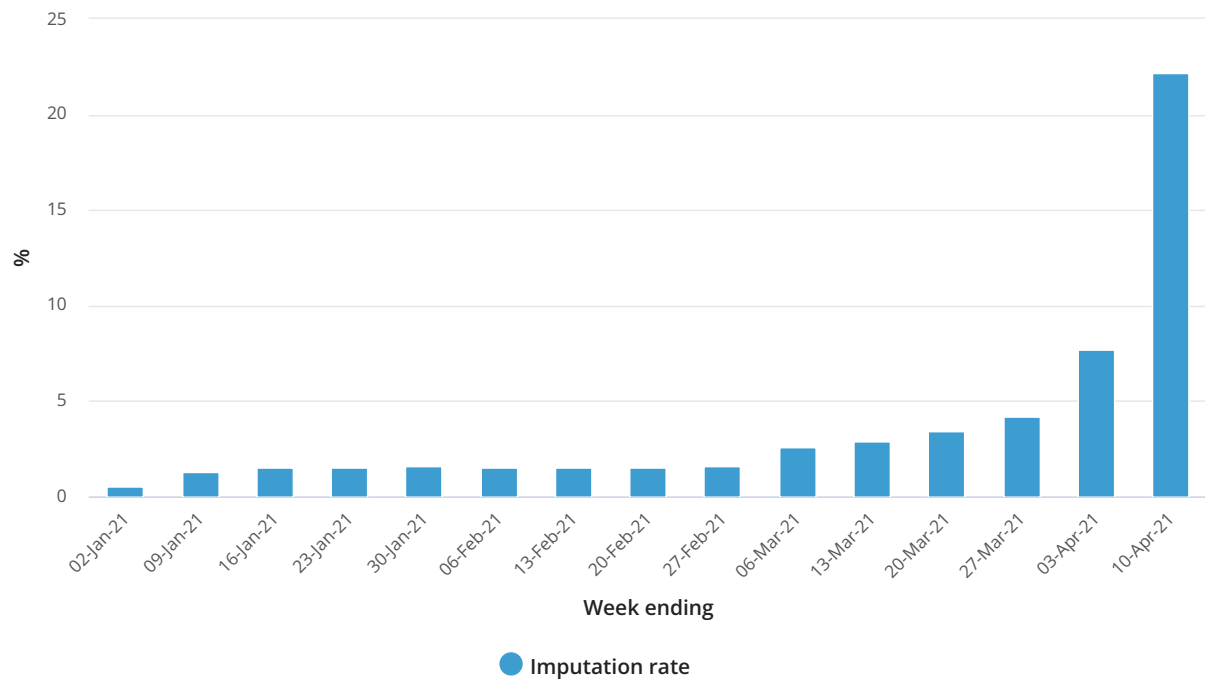
- different business reporting habits;
- different pay frequencies; and
- the lag between the reference week and the release of estimates.

To produce reliable weekly statistics, an imputation method is applied to account for incompleteness. Imputation includes the following considerations:

- Imputation is not applied where no established pattern of payment exists to enable forward extrapolation. For example, a small proportion of employees paid on an ad hoc basis.
- If an employee has not yet had payment data reported and they have not been flagged for termination, it is assumed that their payment status is consistent with their previous reporting record. The previous calculated daily rate will be imputed for the current period.
- If an employee has no payment data reported for two consecutive pay periods, it is assumed that their employment has been terminated. No further forward imputation is applied. Imputed data remains in place until eight pay periods have elapsed, to account for any lags in business reporting.
- No imputation is applied for new employees without historical payment information, until a pattern can be determined. This means that there is an inherent and unavoidable lag before new payroll jobs appear in the data after their initial pay period. The lag is longer for new jobs with employers who have less frequent payment and reporting periods, which is accounted for via a coverage adjustment.

Analysis indicates that STP data for the most recent reference week at the time of initial publication is approximately 75-80% complete and can take several months to be fully complete (due to quarterly STP reporters). The delay in 'completeness' is observed via the level of imputation over time.

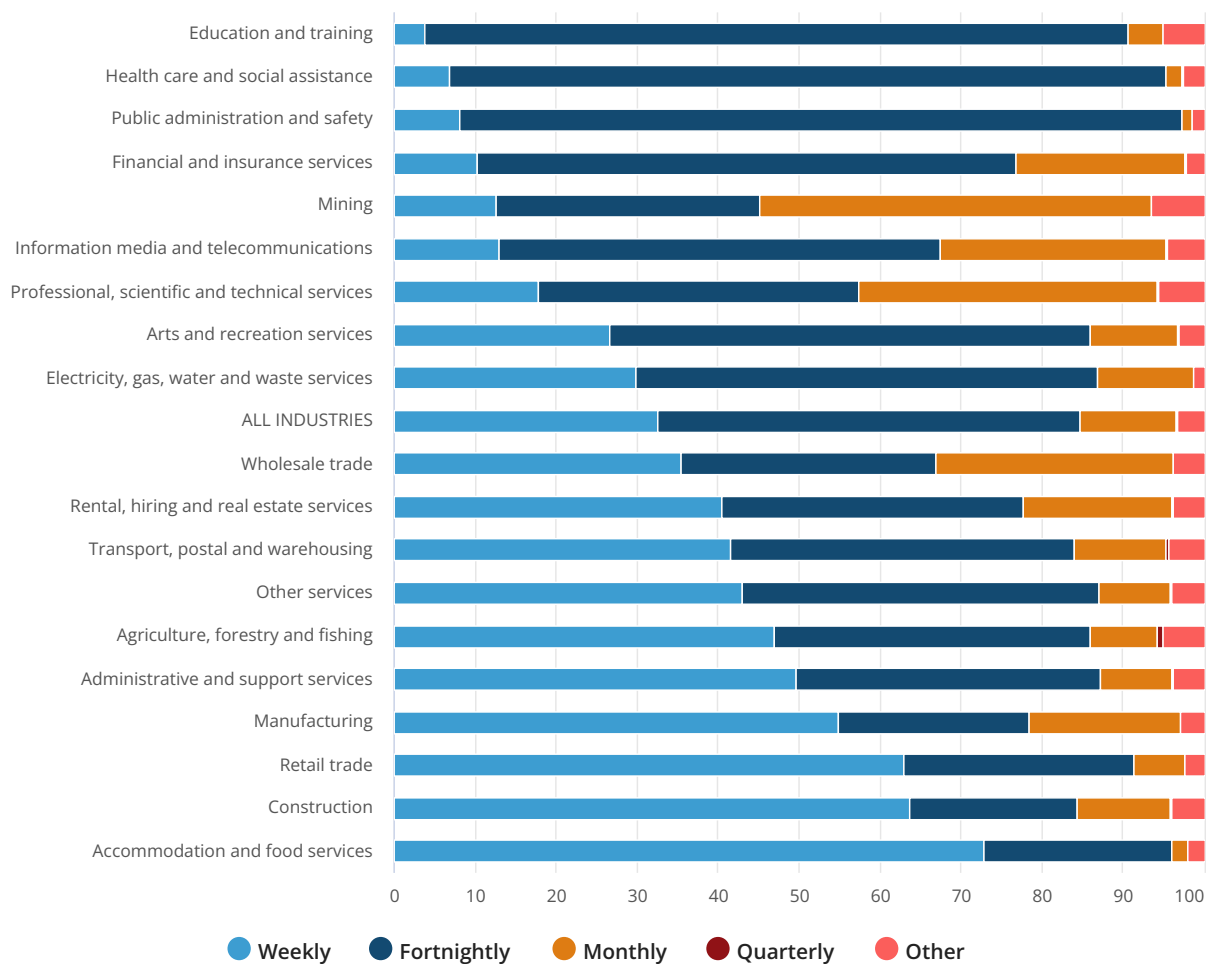
Imputation rate by week ending as at 28 April 2021 release



In any given reference week, business reported data is included for almost all weekly paid employees, most employees paid fortnightly and some employees paid monthly. For example, a business with a fortnightly payroll will only report payments in alternate weeks in the STP dataset. As at the end of March 2021, the data indicated that 33% of employees are paid weekly; 52% are paid fortnightly; 12% are paid monthly; and 3% are paid quarterly or infrequently.

While a fortnightly pay frequency is the most common amongst all industries, the dominant pay frequency varies across industry as seen in the graph below. This may affect the level of imputation in each industry.

Proportion of reported pay frequency by industry



Ranked by ascending weekly pay frequency, for the week ending 27 March 2021.

The imputation method was updated in the week ending 30 January 2021 release. For more information, see the Imputation update subsection of [Methods review \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review\)](#).

Aggregation

Once STP data are converted via the calendarisation method and imputation is applied, the data are aggregated for each week (ending Saturday) to produce:

- total payroll jobs, which is the average of the 7 days of payroll job counts, and
- total wages, which is the sum of all daily wages for the week, except for employees who cease a job during the week where only the wages for the days worked are included.

Suppression

To protect the confidentiality of individuals, data are subject to a suppression process. Data suppression is generally applied to finer level estimates, where a smaller number of individuals contribute to the estimate (such as sub-state indexes). The data suppression process was updated in the 20 October 2020 release, which resulted in an improvement in the quality of the underlying data used to produce the sub-state indexes. Previously released national, state and territory and industry indexes were not changed by this updated process.

Creation of indexes

Estimates are supplied as indexes to provide an indication of movements rather than level estimates. In order to compare changes over time, the week in which Australia recorded its 100th confirmed coronavirus case (i.e. the week ending 14 March 2020) is used as the reference period for constructing the indexes and given an index value of 100.0. These indexes differ from the ABS' suite of price indexes (including the Wage Price Index) which measure changes in price over time unaffected by quality or quantity and should not be directly compared.

Indexes allow comparison of data between two points in time, the points in time can be adjacent (this week and the previous week) or many weeks apart. Movements in the index from one period to another can be expressed as either points or percentage change and these are rounded to one decimal place. The following example illustrates the method of calculating changes in index points and percentage changes between any two periods:

	Index number
Week ending 06 February 2021 for SA4: Melbourne - Inner	98.4
Less week ending 09 January 2021 for SA4: Melbourne - Inner	94.9
Change in index points	3.5
Percentage change	$3.5/94.9 \times 100 = 3.7\%$

The following example illustrates the method of calculating a recovery percentage change between any two periods:

	Index number
National payroll jobs index for week ending 14 March 2020	100
Less National payroll jobs index for week ending 18 April 2020	91.6
Payroll jobs lost from 14 March index value (denominator)	8.4
National payroll jobs for week ending 9 January 2021	97.3
Less National payroll jobs index for week ending 18 April 2020	91.6
Recovery index points (numerator)	5.7
Recovery percentage change	$5.7/8.4 \times 100 = 67.9\%$

These estimates are also affected by the dynamic nature and source of data. The impact on accuracy and coherence with other ABS labour statistics are described below.

Accuracy

STP is a dynamic administrative data source, hence these estimates may be subject to the following sources of error:

- Conceptual misalignment - The Australian tax system is purpose-built and complex, and in some cases it is difficult to determine how a particular STP item should be used to describe impact on payroll jobs and wages. While all care is taken, some income items are subject to this type of validity error. Coherence with other sources indicates that this has a low impact on the aggregate series.
- Reporting error - This is likely to be present in both person and business information used. Most reporting errors are unable to be determined or corrected; however, coherence with other similar statistics demonstrates that this has a low impact on the aggregate series.

For further information, see [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](#).

Coherence

There are differences between these estimates and similar statistics produced by the ABS. When compared to other ABS sources, the change in payroll jobs and wages paid in these estimates may differ due to differences in the concepts, scope and methodology used. For

example, these estimates:

- contain a combination of administrative data collected for taxation purposes from businesses, whereas other ABS data sources are compiled for the explicit purpose of producing statistics,
- exclude unreported cash in hand payments which may be included in household and business surveys,
- may include information relating to a reference week, rather than a particular point in time,
- are not currently able to be adjusted with respect to seasonality, unlike other Labour Force releases, and
- provide a view of payroll jobs, whereas the Labour Force survey presents a view of employed persons. The difference being those people who hold more than one job at a time (i.e. secondary jobs).

For further information, see [Differences to Labour Force employment statistics \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#differences-to-labour-force-employment-statistics\)](#).

How data are released

All estimates are presented for weeks ending on a Saturday. The ABS has worked to optimise both the timeliness and quality of these data, however revisions in subsequent releases are necessary. See [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](#) for more information.

Summary of outputs

Each release contains both payroll jobs and total wages indexes and percentage change movements. Estimates are available at the national, state and territory and [Australian and New Zealand Standard Industry Classification \(ANZSIC\) \(https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0\)](#) division by selected personal attributes, including sex and 5 year and 10 year age group.

Other than indicative numbers on changes in jobs between March and the current period, levels for jobs and wages are not available for release. The payroll jobs index provides a measure of changes in jobs over time since the week ending 14 March 2020. Information on levels for jobs is best sourced from estimates of filled jobs from [Labour Account Australia \(https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-account-australia/latest-release\)](#) and estimates of employed persons from [Labour Force, Australia \(https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-](#)

[australia/latest-release](#)). More information is included in [Differences to Labour Force employment statistics \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#differences-to-labour-force-employment-statistics\)](#).

[Australian Statistical Geography Standard \(https://www.abs.gov.au/websitedbs/d3310114.nsf/home/australian+statistical+geography+standard+\(asgs\)\)](https://www.abs.gov.au/websitedbs/d3310114.nsf/home/australian+statistical+geography+standard+(asgs))). sub-state regions (Statistical Area 4 and Statistical Area 3) Greater Capital City Statistical Area (GCCSA) regions, and ANZSIC subdivision estimates are updated in each release.

Time series estimates

The estimates are presented as an original series only. Seasonally adjusted and trend estimates are not yet available. A number of years of data will be required before seasonal patterns can be observed and adjusted for.

The calendarisation and imputation methodologies applied to the estimates account for calendar related variations, such as the number of days in a month, and different payment frequencies.

Revisions

The data underlying these estimates are revised for each release and reflected in percentage change movements and indexes. See [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](#) for more detail.

Privacy and confidentiality

Legislative requirements to ensure privacy and secrecy of this data have been adhered to. In accordance with the Census and Statistics Act 1905, results have been confidentialised to ensure that they are not likely to enable identification of a particular person or organisation.

All personal information is handled in accordance with the Australian Privacy Principles contained in the Privacy Act 1988. For more information, see [ABS Privacy \(https://www.abs.gov.au/websitedbs/d3310114.nsf/home/privacy?opendocument\)](#).

More information

For more information on this methodology email labour.statistics@abs.gov.au (<mailto:labour.statistics@abs.gov.au>).

Methods review

As part of the transition of the Weekly Payroll Jobs and Wages series from a temporary COVID-19 product to an ongoing ABS output, the ABS are reviewing the methods and refreshing the data sources supporting these estimates. The ABS has investigated methods to improve the quality of payroll job and jobholder characteristics variables: Age; gender; industry; employment size; and geography.

The ABS has progressively implemented updates, as detailed below, resulting in a refresh of existing characteristics values and the population of 'unknown' values.

A regular refresh of the data sources, which support the determination of characteristics variables in these estimates, will be established to maintain the currency and relevance of these data. As updated methods are implemented, more information will be provided here or in [How data are processed \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#how-data-are-processed\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#how-data-are-processed) and [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#data-limitations-and-revisions).

Update of employer characteristics

Weekly payroll jobs and wages indexes are available for a combination of employer characteristics (industry and employment size) and jobholder characteristics (state and region of residential address, age, and sex). Employer characteristics are sourced from the ABS Business Register (BR) data. Jobholder characteristics are sourced from the ATO Client Register.

From the release of 6 July 2021, a March 2021 ABSBR snapshot has been used for employer characteristics of payroll jobs and wages and applied back to the week ending 29 August 2020. Prior to this, a March 2020 ABSBR snapshot was used for the entire series. The ABS recommends that analyses of previously published estimates be refreshed with the latest available data.

The update has reduced the proportion of payroll jobs with unknown employer characteristics from 2.2% of total payroll jobs for the week ending 5 June 2021 (in the 22 June 2021 release) to 0.3% for the week ending 19 June 2021 (in the 6 July 2021 release).

While the national payroll jobs and total wages estimates have not been affected by this update, changes have occurred in indexes presenting industry and employment size. Week-on-week changes remain unaffected in most indexes, except at the transition point in the week ending 29 August 2020. This may be more pronounced for jurisdictions and industries with a small base of payroll jobs. More information on the effect on component indexes is detailed below.

The ABS is working on a method to smooth the change across the ABSBR transition point, which will be applied in a future release. Consequently, users should exercise caution when comparing week-on-week change and index levels for industry and employment size across the transition point.

Updating the ABSBR snapshot

When the Weekly Payroll Jobs and Wages release was introduced, payroll jobs were allocated to an industry or employment size and remained unchanged, given the ABSBR snapshot reflected a point in time and not a dynamic profile. Where an STP reporting business did not exist on the ABSBR snapshot, its employer characteristics were classified as 'unknown'. Records with unknown industry and employment size contribute to the calculation of index totals (for payroll jobs and total wages) but are excluded from industry and employment size indexes. This is also true for instances where employee characteristics are unknown.

In mid-March 2020, the number of payroll jobs with unknown industry or employment size characteristics was small (0.4% of payroll jobs). Over time, the March 2020 ABSBR snapshot became increasingly outdated and the number of payroll jobs with unknown employer characteristics increased. At the time of the 22 June 2021 release (for the week ending 5 June 2021) the proportion of payroll jobs with unknown employer characteristics reached 2.2% of total payroll jobs.

As part of the transition of Weekly Payroll Jobs and Wages in Australia release to a standard ABS product, a regular update of employer characteristics will occur. In preparing for this first update, the data sources supporting a characteristics refresh were investigated. Analysis identified that the proportion of payroll jobs with unknown industry exceeded 1% of total payroll jobs at the end of August 2020. This date was selected as the best transition point for the first refresh of employer characteristics, using the March 2021 snapshot. This timing also aligns with the optimal time of an annual refresh, if deemed the best approach.

Employer characteristics have been updated using the March 2021 ABSBR snapshot, from the week ending 29 August 2020 up to the latest reference week. The update has reduced the number of records with unknown characteristics, in addition to refreshing some existing values. More information on the changes seen in industry and employment size are detailed in the sections below.

As the March 2021 ABSBR snapshot ages, the proportion of records with unknown industry and employment size is expected to increase again. The ABS anticipates that snapshots will be refreshed on at least an annual basis. A smoothing method will also be developed to remove the effect of this update at the transition point, to manage the series across

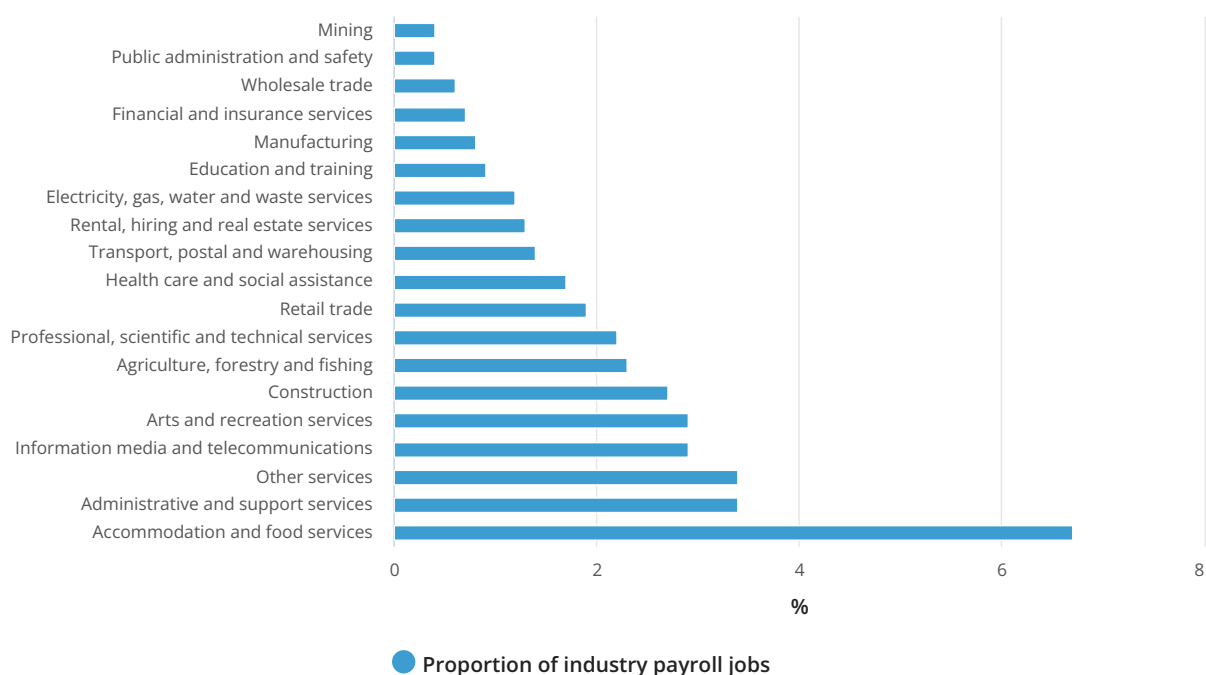
multiple ABSBR snapshots.

Update to Industry

Except for the ABSBR snapshot transition point (in the week ending 29 August 2020) the update has had minimal impact on week-on-week change in industry indexes. However, some industry index levels (including those by state and territory) have seen varying magnitudes of change from the transition point forward. This is predominantly due to the distribution of payroll jobs whose industry were unknown. A small proportion of payroll jobs also saw a change in existing industry.

The update has resulted in payroll jobs with an unknown industry being added to totals for all industries, ranging from a 0.4% increase in both Mining and Public administration and safety to a 6.7% increase in Accommodation and food services.

'Unknown' additions, as a proportion of payroll jobs for each industry



As at the week ending 29 August 2020, in the 6 July 2021 release.

Almost all the change seen in the industry indexes at the ABSBR transition point relate to

the update of unknown industry values. This is because the main industry of a business tends not to change within a year, which the ABS confirmed through analysis of industry values between the March 2020 and 2021 ABSBR snapshots.

Update to employment size

The ABSBR update has reduced payroll jobs with unknown employment size from 2.1% of total payroll jobs for the week ending 5 June 2021 (as released on 22 June 2021) to 0.3% for the week ending 19 June 2021 (in the 6 July 2021 release).

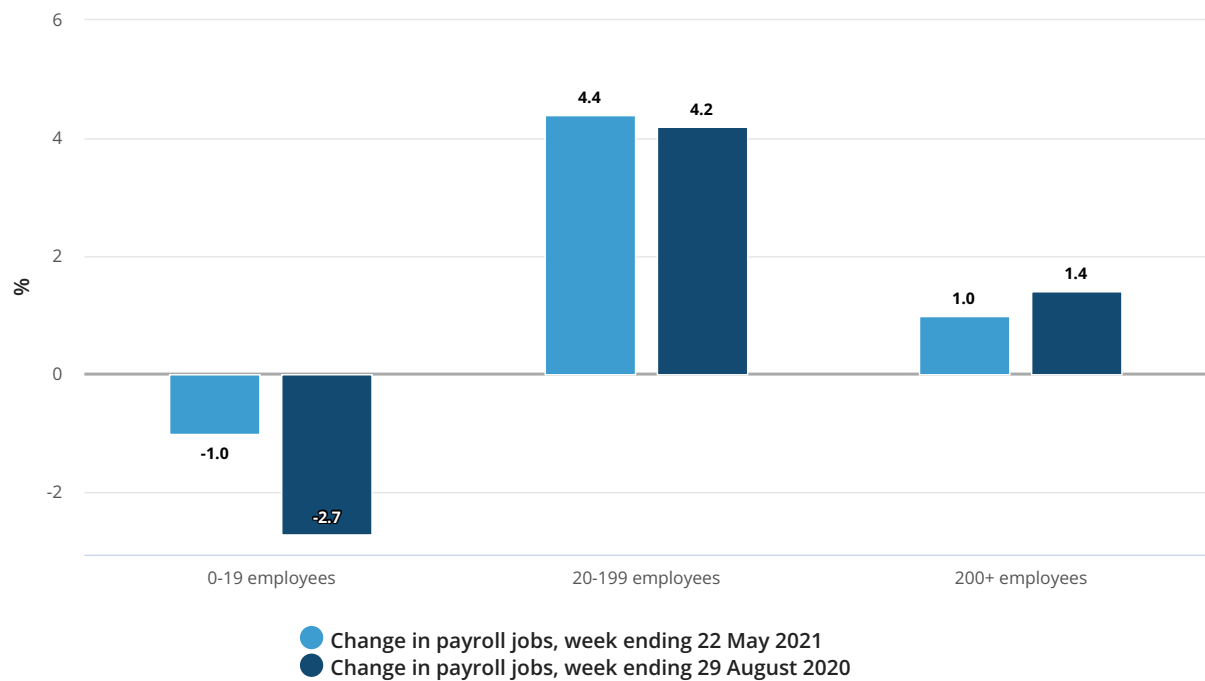
Over time, businesses are more likely to change employment size than industry. This was confirmed through comparisons of the 2020 and 2021 ABSBR snapshots, which showed that around 7% of payroll jobs were with continuing employers that changed employment size group between the two snapshots. The greatest change was seen between the 0-19 and 20-199 employees groups.

Analysis of the unknown employment size records identified that the majority (over 80%) belonged to the 0-19 employees group. The addition of unknowns to the 0-19 employees group increased its payroll jobs by around 6%. However, this increase was entirely offset by the refresh in known employment size values, with around 11% of its payroll jobs moving up a size to the 20-199 employees group (and an additional 2% moved up into the 200 or more employees group).

The 20-199 employees group gained around 3% more payroll jobs from the 200 or more employees group, on top of the those gained from the 0-19 employees group. The 200 or more employees group had the least amount of change, gaining less than 1% more payroll jobs from the other size groups.

The overall effect of unknown employment size being updated, and existing values being refreshed, can be seen in the following graph.

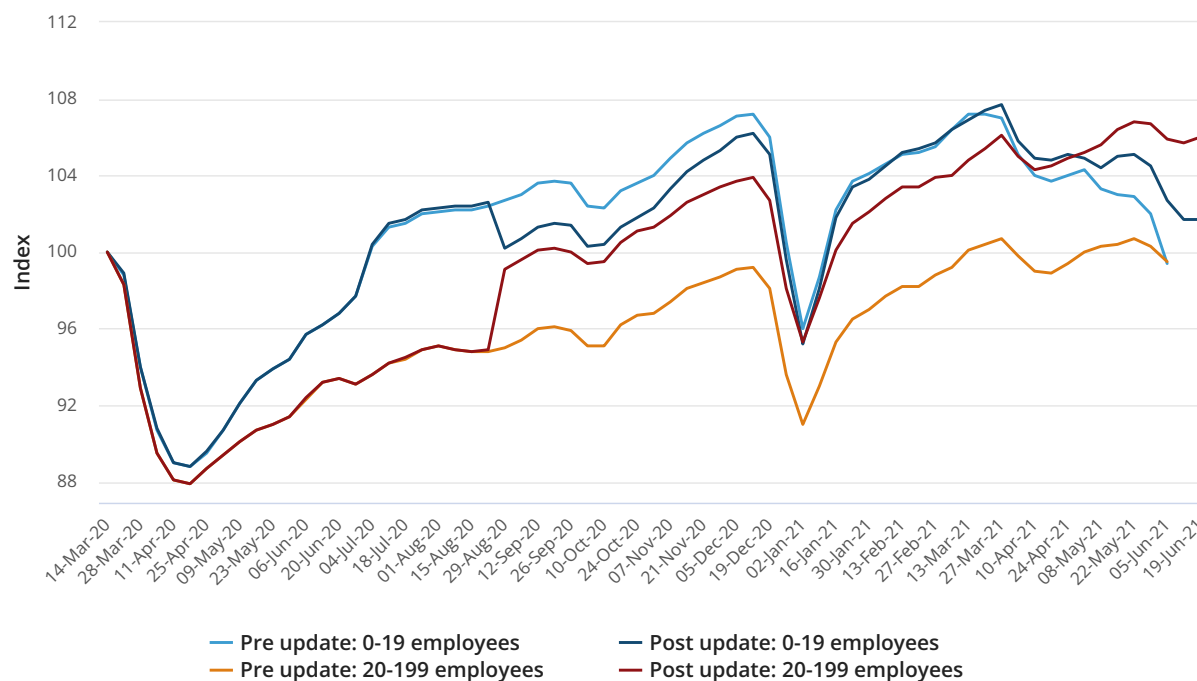
Percentage change in payroll jobs by employment size, after ABSBR update



Over time, the number of payroll jobs in each employment size has grown. Businesses with less than 20 employees have seen greater growth in payroll since August 2020, which may also affect comparison.

The effect of the update on the indexes for the 0-19 and 20-199 employees groups can be seen in the following graph which includes the ABSBR transition point.

Payroll jobs by employment size



Pre update indexes use data from the 22 June 2021 release. Post update indexes use data from the 6 July 2021 release, and include updated and revised data for the previous weeks.

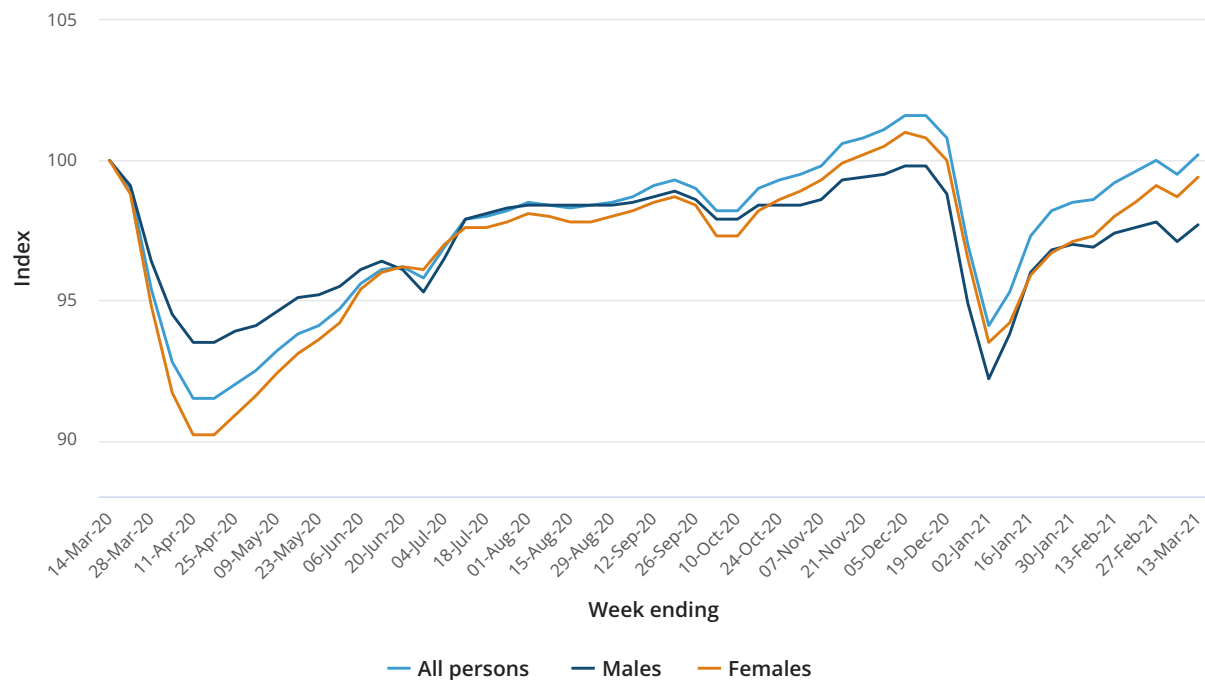
Update of jobholder characteristics

Jobholder characteristics presented in these estimates are sourced from both STP and ATO Client Register data. While the STP data set is a dynamic data source, the Client Register is a point in time snapshot of data. Prior to the release for the week ending 27 March 2021, the Client Register snapshot used was from mid-2019.

STP records whose characteristics cannot be determined from STP or the Client Register snapshot are assigned to an 'unknown' category. Records with unknown characteristics are included in the calculation of index totals (for payroll jobs and total wages), but are excluded from the component indexes (such as males and females). As persons join the workforce or register with the ATO for the first time, the Client Register snapshot becomes outdated and the number payroll jobs with unknown characteristics increases.

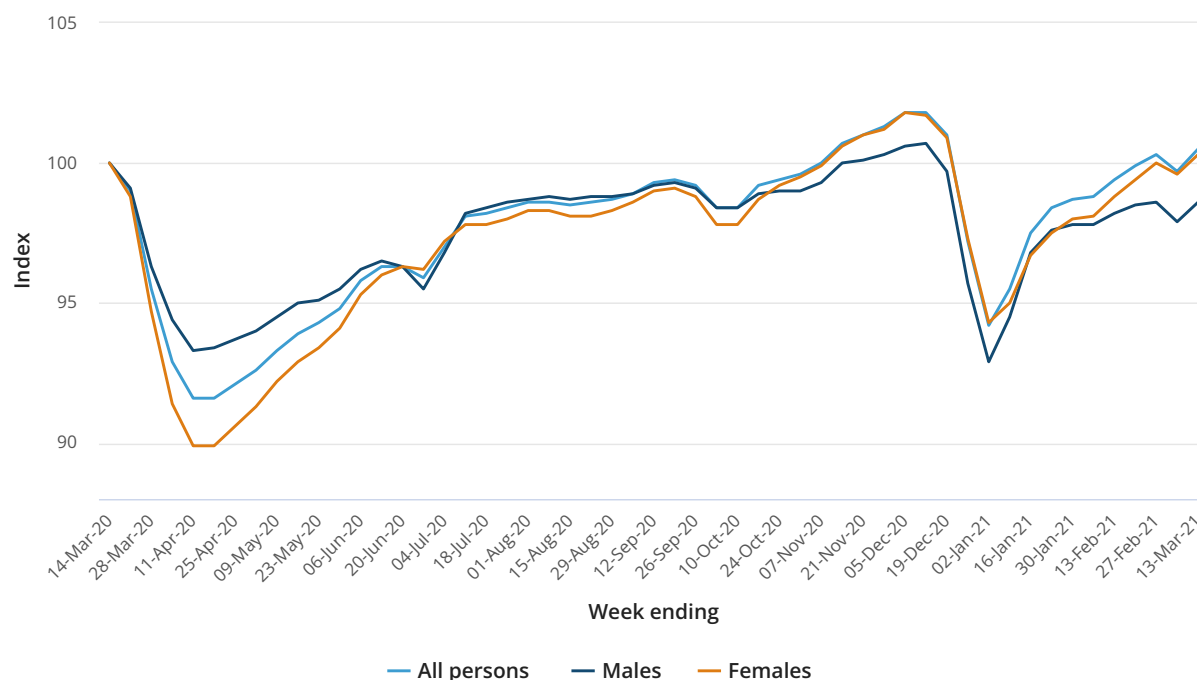
The effect of an increasing number of unknowns is visible in the divergence of the male and female payroll jobs indexes from the all persons payroll jobs index as released on 30 March 2021 for the week ending 13 March 2021.

Payroll jobs by sex, 2019 Client Register source



From the release of week ending 27 March 2021, a mid-2020 snapshot of the Client Register has been used to update jobholder characteristics. The number of records with unknown characteristics has been reduced, in addition to some existing values being updated, causing varying levels of revision across the time series. Adjusted male and female payroll jobs indexes (as released on 30 March 2021 for the week ending 13 March 2021) after the Client Register update are presented below for comparison to the above graph.

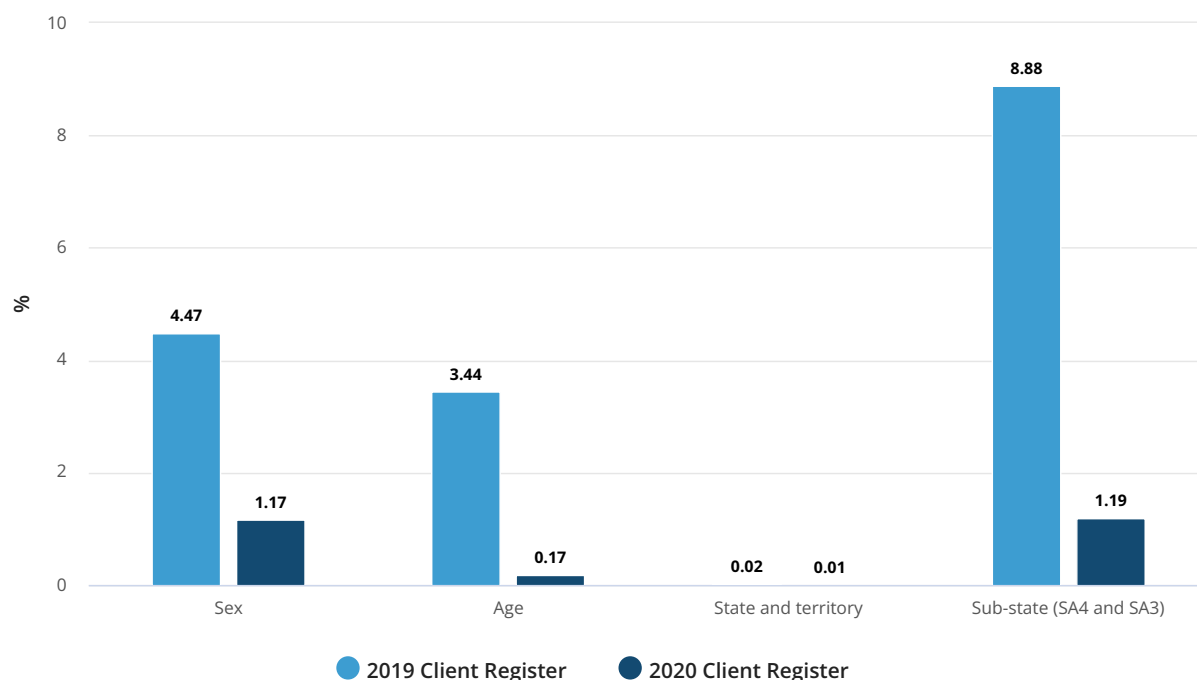
Payroll jobs by sex, 2020 Client Register source



Jobholder characteristics, such as date of birth, sex and geography (including sub-state region) were updated using the mid-2020 snapshot and are held constant across the time series, to enable the change in payroll jobs and wages information to be produced without the volatility in characteristics. Age continues to be updated based on the job holders date of birth (see the Age derivation update section in [Methods Review \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review\)](#) for more information). Total payroll jobs and wages indexes were not impacted by the Client Register update.

The level of revision seen in component indexes can be higher for some jobholder characteristics and can vary across the time series or the index of interest. The impact of revisions will be relative to the proportion of unknowns for those characteristics, as detailed in the table below.

Proportion of unknown jobholder characteristics at week ending 13 March 2021



The proportion of unknown sex, which is only sourced from the Client Register, is expected to increase over time as the Client Register snapshot ages. Proportions of unknown age and geography remain small over time, as they can also be derived from STP data.

The Client Register snapshot used in these estimates, will be updated on at least an annual basis. The ABS is currently investigating suitable timing and frequency of future Client Register updates.

Imputation update

As part of the ongoing methods review, the imputation method was reviewed and updated in the release of 16 February 2021 (for the week ending 30 January 2021). Imputation is used to estimate values for incomplete data in the most recent pay period, to account for different payment frequencies and business reporting patterns. For more information on how imputation is applied, see the Imputation section of [How data are processed \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-](#)

[july-2021#how-data-are-processed](#)).

The imputation method uses a derived 'final pay frequency' (based on reported pay events in the STP data) to determine which pay events will be imputed. In the previous method, the final pay frequency was the mode frequency of the three largest pay events of a payroll job. Investigations determined that this method did not impute pay events where a mode could not be calculated.

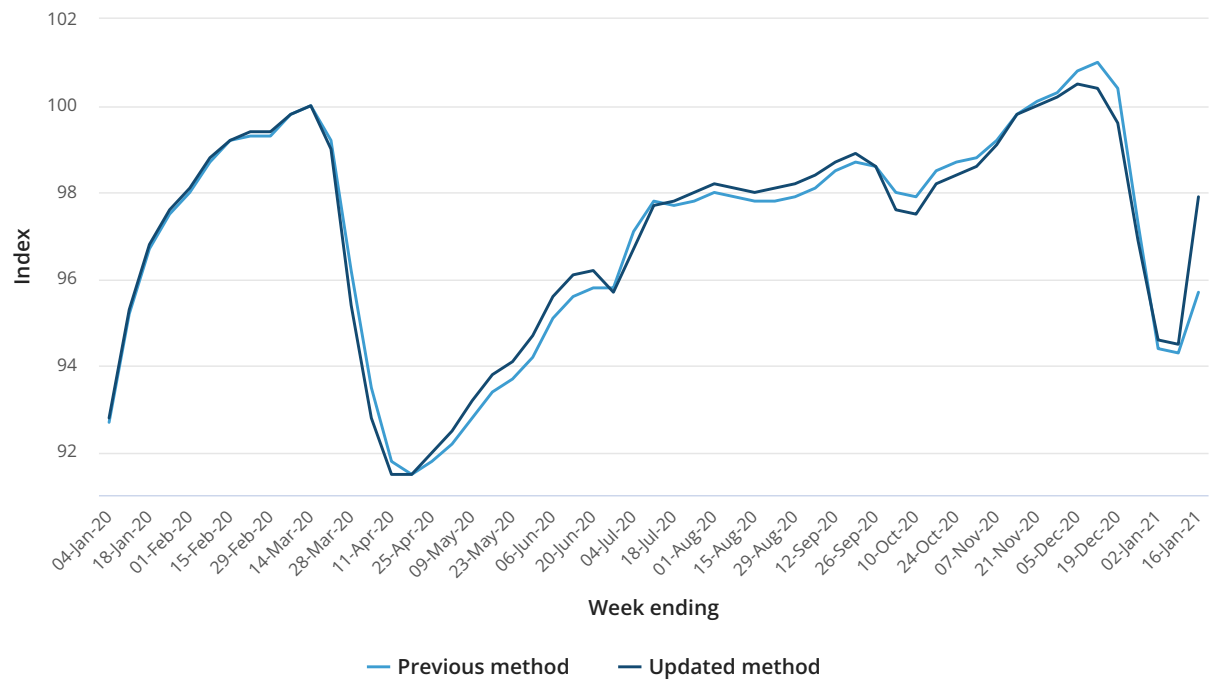
The updated method seeks to optimise the number of pay events imputed, while ensuring that imputation is not applied continuously. This is achieved by:

- determining final pay frequency based on the mode of the three most recent pay events, using the median pay frequency if the mode cannot be determined; and
- removing imputation when subsequent business reporting indicates that imputation is not required.

Across the time series, all indexes (including component indexes) are affected by the updated method. The updated imputation method has been applied across all historical data, resulting in revisions across the time series. Revisions may be more pronounced in finer component indexes, such as state by industry. The ABS recommends that analyses of previously published estimates be refreshed with data from this release.

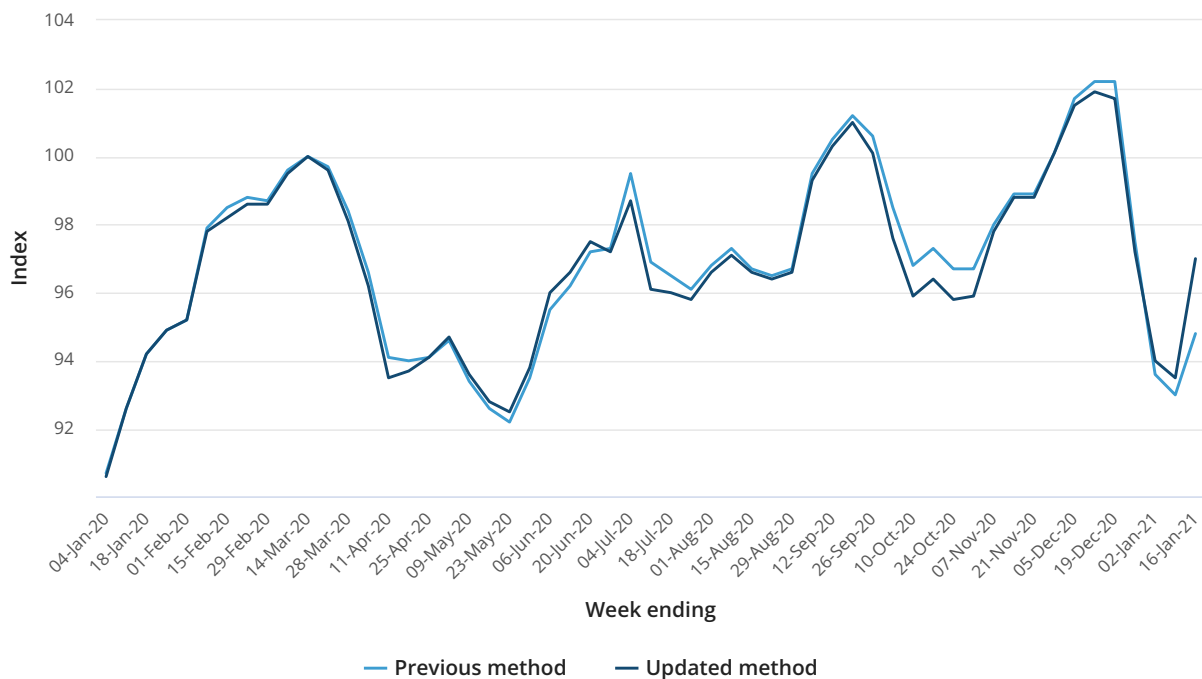
The updated method is designed to deliver a reduced magnitude of future revisions, particularly in the most recent week's data. The following graphs present separate comparisons of payroll jobs and wages, using the updated and previous methods against data as released on 2 February 2021 for the week ending 16 January 2021.

Payroll jobs by imputation methods



Source: [Weekly Payroll jobs and Wages, Week ending 16 January 2021 \(/statistics/labour/earnings-and-work-hours/weekly-payroll-jobs-and-wages-australia/week-ending-16-january-2021\).](#)

Total wages by imputation methods



Source: [Weekly Payroll Jobs and Wages, Week ending 16 January 2021 \(/statistics/labour/earnings-and-work-hours/weekly-payroll-jobs-and-wages-australia/week-ending-16-january-2021\)](#).

Age derivation update

In line with the Methods review outlined above, an investigation of existing methods highlighted an issue with the derivation of age (and consequently age group indexes). The issue related to how age was determined with respect to the current reference week. For example, at the time of the first release on 21 April 2020, there were approximately 509,000 payroll jobs reported to be held by 15-19-year olds in the week ending 14 March 2020. As at the 19 January 2021 release, this cohort was estimated to contain 434,000 payroll jobs for the week ending 14 March 2020.

Previously, a person's age (and age group) was redefined at each reference week and updated to the start of the time series included in that release. This resulted in the age group population being measured in each reference week changing over time, and

becoming increasingly different to the population of interest. This issue particularly impacted the time series of the youngest (aged 15-19 years) and oldest (aged 70 years and over) persons age groups.

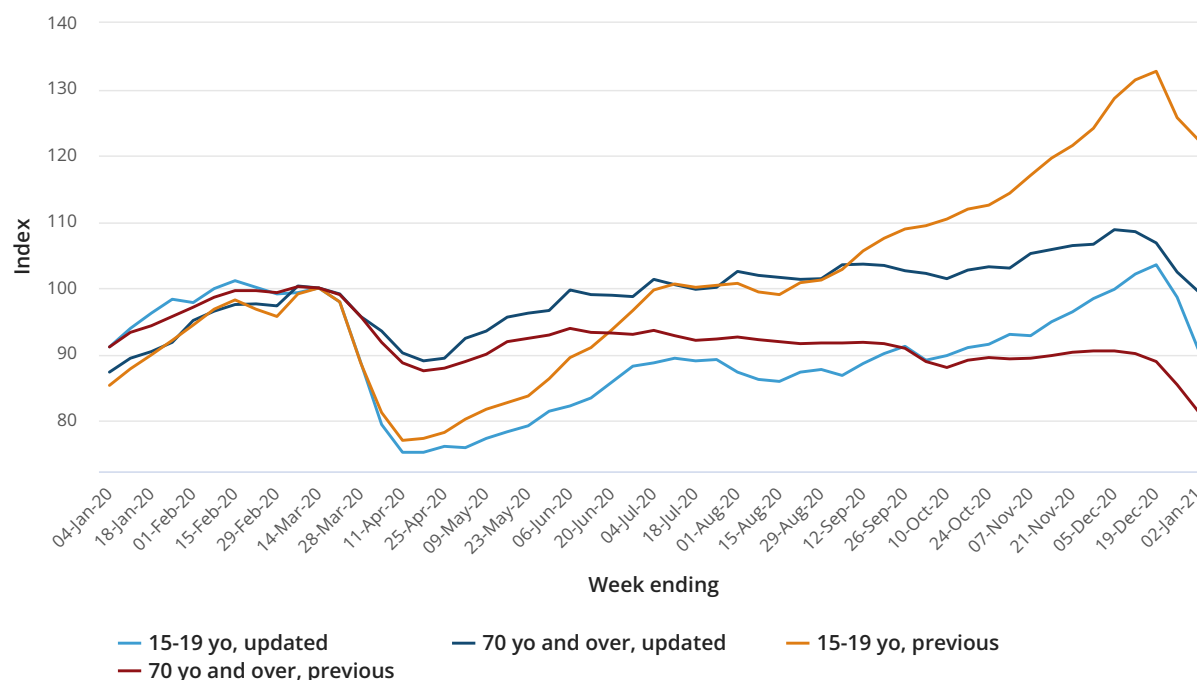
In the 2 February 2021 release, the derivation method was updated to: hold a person's age (and consequently age group) constant until their birthday month; and 'age' a person at the start of their birthday month. That is, at the start of each calendar month, the age of all job occupants with a birthday in the coming month will be updated to that of their upcoming birthday.

Privacy protection has been increased by using calendar month to update age, rather than the more precise day and month. However, it may introduce a small amount of volatility in the week on week change at the start of each calendar month. That is, a portion of the movement in age group at the start of the month (payroll jobs and wages) may relate to the 'aging' of persons as they transition up an age group.

Indexes for national, state/territory, industry and employment size estimates are not affected by the updated method, as only those indexes with an age dimension have been impacted.

A comparison of payroll jobs is presented in the following graph for the age groups most affected by the change in method, using data from the 2 February 2021 release.

Payroll jobs by selected age groups by age derivation methods



Source: [Weekly Payroll Jobs and Wages, Week ending 16 January 2021 \(/statistics/labour/earnings-and-work-hours/weekly-payroll-jobs-and-wages-australia/week-ending-16-january-2021\)](#).

Data limitations and revisions

Weekly Payroll Jobs and Wages in Australia estimates are derived from data collected via the STP system, which effectively supports employer reporting obligations and ATO operational requirements through enabled software. However, it is not primarily designed to support the production of statistics and therefore some inherent limitations of the data require specific treatment and result in data revisions between statistical publications.

The weekly change estimates for the most recent weeks of data contain a higher degree of reporting variability and imputation (described further below). The ABS recommends that users exercise caution when focusing on change in the most recent weeks, as these estimates are subject to a greater levels of revision in subsequent releases.

As the compilation of these estimates evolves, reporting patterns sometimes arise which require detailed analysis and treatment. Outcomes from these analyses may result in changes to methodology or revisions to data which will be updated here, as required.

Week on week revisions

Payroll jobs and wages estimates (including percentage change movements and indexes) are revised in each release across the time series. These revisions arise from:

- the aim to release data as close as possible to the period when the activity occurred,
- the receipt of more complete STP data over time,
- the incorporation of newly available businesses in STP reported data.

Revisions have the greatest impact on the most recently reported information. Over time, as more business-reported data is received, the size of revisions decreases. To reduce the impact of week on week revisions, the ABS uses historical information to impute the most recent weeks data. The ABS is taking a cautious approach to imputation as factors influencing jobs can occur unexpectedly, for example, the surge in COVID-19 cases in Victoria in July 2020.

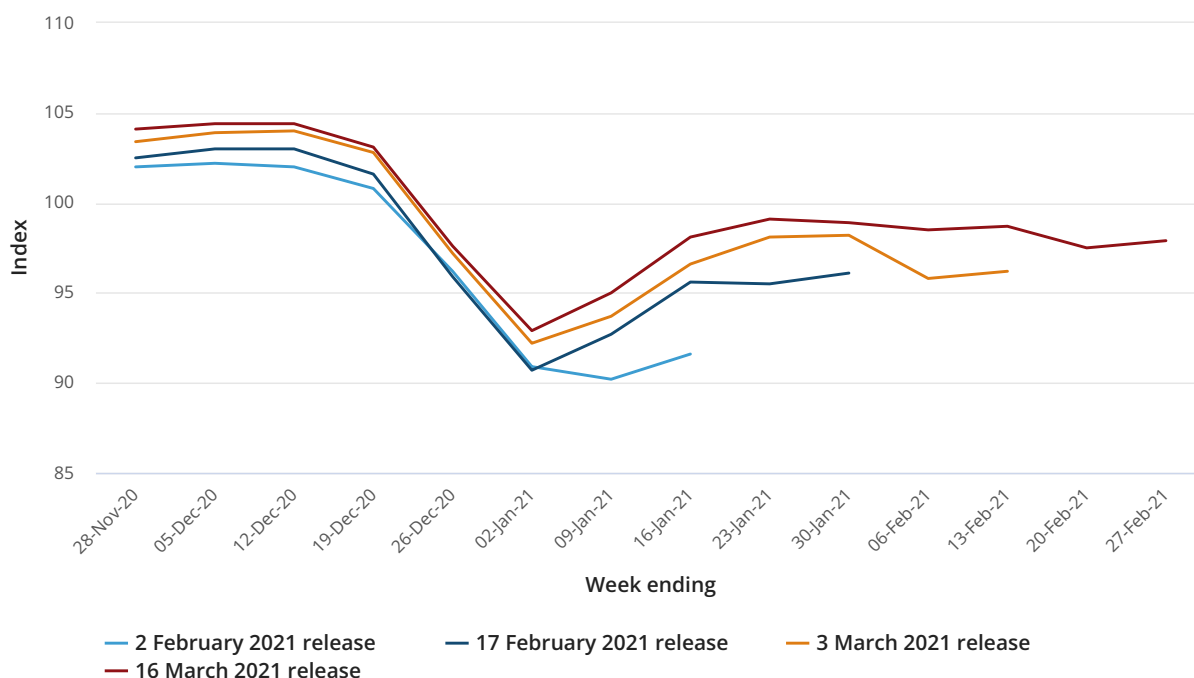
Variation in revisions

The size of revisions and the period over which they apply can vary between indexes. Some component indexes are subject to higher than usual levels of revision, over a longer period. For example, the employment size indexes show both a higher incidence and duration of revision. This is most noticeable in the small employers group (those with under 20 employees). The following characteristics of this group contribute to the variation in revision of their estimates:

- higher levels of reporting variability;
- a greater incidence of longer payment periods (such as quarterly); and
- graduated STP onboarding.

The following graph presents data from consecutive releases to highlight the impact of revisions for this cohort (as applied in consecutive releases).

Revision of payroll jobs index for Under 20 employment size, for selected releases



The ABS is currently investigating methods to reduce the future level of revisions in this series.

In the 28 April 2021 release, the period over which historical imputation (for employees assumed to be terminated) is removed was changed to better account for lags in business reporting and differing pay frequencies. Previously, if an employee received no payment after 3 pay periods, historical imputation was removed for the previous 2 pay periods. From this release, while forward imputation still ends after 3 pay periods, the imputed data remains in place for 8 pay periods. This method change has resulted in the reinstatement of some imputation in earlier time periods, causing differing levels of revision in the time series although week on week change remains similar. Some component indexes (such as industry) may see greater variation in revisions at different time points due to the contribution of dominant pay frequencies. For more information on the dominant pay frequency of industries, see the Imputation section of [How data are processed \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#how-data-are-processed\)](#).

Incorporating new employer reported data

As new businesses commence reporting through STP, the ABS determines when the business appears in the dataset for the first time and distributes the year to date jobs and wages across all past payment periods for the current financial year. This ensures that weekly estimates best reflect change in the labour market over time through payment activities, rather than changes in the uptake of STP reporting by the businesses. This approach necessitates revisions across the time series. From the 19 January 2021 release, the method used to backcast data for new reporters was adjusted to ensure that it better reflects when wages were actually paid.

Similarly, there can be a delay for new employees to appear in the STP data. By analysing the data over time, the ABS determined that a coverage adjustment was needed. This adjustment is only applied to the last week of estimates in each release.

Reporting variability

Wage estimates are subject to a higher degree of reporting variability (due to seasonal variation in payments, changes in working hours and overtime) and revisions than the payroll jobs estimates. While the ABS accounts for employees being paid with different frequencies (weekly, fortnightly etc.) there are points in the year when additional reporting activity is more common such as the end of financial year, which may flow through to published estimates.

May 2020

Reduced wages which are observed through May 2020 (and are more pronounced in COVID-19 impacted industries) may reflect a combination of:

- reduced wages being paid by COVID-19 affected employers, who may also have reduced hours over the period - particularly for jobs that weren't eligible for JobKeeper support,
- seasonal changes in wages (including bonus payments), and
- potential payroll reporting changes for some employers during May 2020. This could include changes to payment frequency or payment categorisation, both of which could affect the imputation methodology and how payments are effectively apportioned onto an accruals basis.

The first 'JobKeeper' payments were received by employers in the first week of May 2020. JobKeeper monies paid to employees through STP-enabled payrolls are incorporated into the wages index. Further information on the treatment of JobKeeper in ABS economic statistics can be found in [Economic measurement during COVID-19: Selected issues in the](#)

Re-submission of historical pay periods

The dynamic nature of STP data can result in revisions to payroll jobs and wages indexes, caused by the re-submission of payroll data for historical pay periods (including prior financial years) by STP-enabled businesses. When re-submission results in an update to payroll jobs and wages levels at the index base reference period (of 14 March 2020), a revision across the index time series in component indexes may be observed.

End of financial year

Payroll jobs and wages data during June and July see a greater variation in business reporting, due to:

- employers finalising their year to date employee earnings information,
- a reset of financial year in payroll systems, and
- end of financial year bonus and commission payments.

These factors can translate to a higher variation in estimates over this period, as well as revisions, particularly in wages estimates.

Seasonality

These estimates are presented as an 'original' data series, and do not include seasonally adjusted or trend data time series found in other labour statistics releases (e.g. Labour Force).

STP is a relatively new program (and data source). Generally, three to five years of data are required before good seasonally adjusted data can be produced, hence it is not yet possible to produce a seasonally adjusted series (with seasonal elements removed) or trend series (with both the seasonal elements and irregular fluctuations removed). This means that variations in these estimates may reflect COVID-19 related impacts in the economy in addition to seasonal changes in the labour market.

Seasonal characteristics which may be observed include effects seen:

- around national public holidays, where increases in the total wages series are seen in industries where penalty rates are paid;
- ahead of the Christmas period, where considerable labour market activity in a range of industries increases payroll jobs and wages,
- across school holiday periods, where some industries experience lower business activity. This is particularly pronounced in the holiday period after Christmas, resulting in a

decrease in the national payroll jobs and total wages series,

- in industries where periodic bonuses are paid. While bonuses may be paid at any time during the year, they often have an industry pattern. For example, the effect of bonus payments are seen in March and September in both the Mining and Financial and insurance services industries total wages series.

As seasonal characteristics are further identified in these data, this list will be expanded.

Agriculture, forestry and fishing industry

The Agriculture, forestry and fishing industry is subject to higher rates of week-on-week change in the payroll jobs and wages series than other industries. This is primarily due to greater peaks and troughs caused by seasonal factors that affect employment such as harvesting or shearing. Employers in this industry have also had STP reporting concessions which permit them to report on a less frequent basis than each pay event. These concessions were due to cease at the end of June 2021.

Data components, totals and index calculation

STP data is linked to other information held by the ABS to derive demographic and business characteristics such as age group, sex, geography and industry. If a specific characteristic cannot be linked or derived, and does not appear on the STP file, it is assigned an 'unknown' category (for that characteristic).

Records with 'unknown' characteristics are included in the calculation of index totals for that category. As 'total' and 'component' indexes are calculated independently, the inclusion of records with 'unknown' characteristics in a 'total' index can result in independent movement from 'component' indexes. For example, the 'total' index of Persons is calculated from the combined levels of Males, Females and 'unknown' (persons for whom a Male/Female sex cannot be determined). As a result, the Persons index can move independently from Male and Female indexes, which do not include 'unknown' persons. While the proportion of unknown characteristics vary by characteristic, their impact will be compounded in components of finer indexes (such as in State and territory by sex by age group).

Since the 19 January 2021 release, business data with an 'unknown' industry characteristics have been included in all index calculations (with the exception of industry indexes as the characteristic is 'unknown'). These data were previously excluded from the total payroll jobs and total wages time series.

Hours worked, job attachment and employment status

STP data does not include information on hours worked or hours paid for. Analysis of

monthly hours worked can be found in [Labour Force, Australia \(https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release\)](https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia/latest-release), and [Labour Force, Australia, Detailed \(https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release\)](https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release). STP data are also unable to account for job attachment where a payment has not been made, where a jobholder was temporarily stood down without pay.

The estimates do not include information on the employment status of employees, i.e. full time or part time. This will be explored as part of ongoing work between the ABS and the ATO. In the interim, this information is also available within the suite of Labour Force releases.

Acknowledgement of source

STP data is supplied by the ATO to the ABS under the Taxation Administration Act 1953, which requires that such data is only used for the purposes of administering the Census and Statistics Act 1905. Any discussion of data limitations or weaknesses is made within the context of using the data for statistical purposes, and is not related to the ability of the data to support the ATO's core operational requirements.

These estimates also include Australian Business Register (ABR) data supplied by the Registrar to the ABS under A New Tax System (Australian Business Number) Act 1999, which requires that such data is only used for the purpose of carrying out functions of the ABS. Any discussion of data limitations or weaknesses is in the context of using the data for statistical purposes, and is not related to the ability of the data to support the ABR's core operational requirements.

The ABS would like to acknowledge the critical support from the Australian Taxation Office (ATO) in enabling the ABS to produce these statistics.

Differences to labour force employment statistics

The Weekly Payroll Jobs and Wages in Australia indexes give a complementary insight to Labour Force statistics on employment and unemployment, which provide a longstanding and comprehensive view of the Labour market.

The two releases generally show similar national changes in jobs and employment over time, however at the state/territory and industry levels, the differences can be more pronounced. The differences in concepts, scope and methodology used to produce these statistics can affect their interpretation as economic measures. Some factors that explain

differences at the state/territory and industry levels include:

- Real world factors - scope of STP reporting, multiple jobholding and seasonality, and
- Measurement factors - sampling variability, reporting variability and classification variability

The following key differences should be considered when comparing these statistics:

	Weekly Payroll Jobs and Wages in Australia	Labour Force statistics
Focus of the statistics	Jobs.	People.
Coverage	<p>Around 10 million payroll jobs for which a payment was reported to the ATO through STP.(a)</p> <p>99% of employers with 20 or more employees currently report through STP and over 75% of smaller employers (expected to be closer to 100% after July 2021, when the ATO removed exemptions and reporting concessions).</p> <p>Coverage has increased steadily from January 2020 as more employers start reporting through STP.</p>	<p>All usually resident civilian people aged 15 and over (around 21 million people, of whom 13 million are employed).</p> <p>Statistics are based on a large survey sample of around 50,000 people responding every month.</p>
Revisions	<p>Revised every release as payroll periods are completed (with imputed data replaced with actual data) and as coverage increases. This ensures comparability over time.</p> <p>Revised as jobholder and employer characteristics are periodically updated (currently annually).(b)</p>	<p>Small revisions every 3 months, aligned with new population statistics.</p>
Types of employment	<p>Employee jobs who are paid through a STP-reported payroll.</p> <p>Also includes a small number of jobs for non-employees who are also paid through STP-reported payrolls. Payroll jobs for which a payment was reported to the ATO through STP.</p>	<p>All employed people, including: Employees (including Owner managers of incorporated enterprises); Owner managers of unincorporated enterprises; Contributing family workers.</p>

	Weekly Payroll Jobs and Wages in Australia	Labour Force statistics
Whether paid	Only includes payroll jobs for which a payment was reported to the ATO through STP or there is an established payment pattern.	Includes all employed people who were paid or who had a job but weren't paid (on unpaid leave, temporarily stood down without pay, etc.).
Multiple job holding	Each job is counted separately, irrespective of whether it is worked by a multiple jobholder. People who work multiple jobs may be counted multiple times. Industry is identified for each job, not just the main job and the level of multiple jobholding can vary between industries.	Each person is only counted once, and job characteristics (other than hours) relate to a person's main job. Around 6% of employed people are multiple jobholders, particularly young people.
Location	Residence of the jobholder, based on address held by the ATO.	Place of usual residence of people at the time of the survey.
Time series	Original index series. No seasonally adjusted or trend series are available yet.	Original and seasonally adjusted (trend is currently suspended, during the COVID-19 period).

- a. The compositional breakdown of payroll jobs can be found in [Distribution of jobholder and employer characteristics \(/articles/distribution-jobholder-and-employer-characteristics/\)](/articles/distribution-jobholder-and-employer-characteristics/).
- b. The process used to update jobholder and employer characteristics and revisions can be found in [Methods review \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review/\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#methods-review/).

Labour Force analysis of employment versus payroll jobs up to August 2020 can be found in [Strong employment growth for non-employees \(/articles/strong-employment-growth-non-employees/\)](/articles/strong-employment-growth-non-employees/). More information on the differences between Weekly Payroll Jobs and Wages estimates and similar ABS statistics are detailed in the Coherence section of [How data are processed \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#how-data-are-processed/\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-17-july-2021#how-data-are-processed/).

History of change

A timeline of recently implemented methodological changes are listed below for easy reference.

By release date

Week ending 19 June 2021

- [Update of employer characteristics \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-19-june-2021#methods-review\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-19-june-2021#methods-review) - ABS Business Register snapshot update to industry and employment size variables

Week ending 10 April 2021

- [Historical imputation \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-10-april-2021#how-data-are-processed\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-10-april-2021#how-data-are-processed) - period over which historical imputation is removed for terminated employees changed from 3 to 8 pay periods.

Week ending 27 March 2021

- [Update of jobholder characteristics \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-27-march-2021#methods-review\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-27-march-2021#methods-review) - Client Register snapshot update to sex, age and geography variables

Week ending 30 January 2021

- [Imputation update \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-30-january-2021#methods-review\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-30-january-2021#methods-review) - to deliver a reduced magnitude of future revisions, particularly in the most recent week's data

Week ending 16 January 2021

- [Age derivation update \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-16-january-2021#data-limitations-and-revisions\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-16-january-2021#data-limitations-and-revisions) - a person is aged at the start of their birthday month instead of redefining age each reference week

Week ending 2 January 2021

- Update of characteristics variables - Employers with unknown industry included in estimates, as noted in [Data limitations and revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-2-january-2021#data-limitations-and-revisions\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-2-january-2021#data-limitations-and-revisions)

Week ending 14 November 2020

- [Week on week revisions \(/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-14-november-2020#data-limitations-and-revisions\)](/methodologies/weekly-payroll-jobs-and-wages-australia-methodology/week-ending-14-november-2020#data-limitations-and-revisions) - persons aged 15 years excluded from the under 20s age group

Glossary

Show all

Accrual basis

Recording wages when they are earned, accrued or incurred regardless of when payment is made or received.

Australian Bureau of Statistics Business Register

A register of all Australian businesses and organisations maintained by the Australian Bureau of Statistics (ABS) for the purpose of producing statistical frames and business demography outputs. It contains identifying and classificatory data for each business and organisation.

Information to populate the ABS Business Register is largely sourced from the Australian Business Register.

The ABS Business Register consists of two subpopulations, the profiled population and the non-profiled population. The ABS Business Register uses an economic units model to describe the characteristics of businesses and the structural relationships between related businesses.

Australian Business Number

A unique identifier. To be entitled to an Australian Business Number (ABN), an organisation must be one or more of the following:

- a company registered under the Corporations Act 2001
- an entity carrying on an enterprise in Australia
- a government entity
- a non-profit sub-entity for Goods and Services Tax purposes
- a superannuation fund.

A non-resident entity may be entitled to an ABN if they are carrying on an enterprise in Australia and/or, in the course of carrying on an enterprise, the entity makes sales that are connected with Australia.

Australian Business Register

The data store containing details about businesses and organisations that have registered for an Australian Business Number. More information can be found on the [ABR website \(https://abr.gov.au/\)](https://abr.gov.au/).

Australian Tax Office person-level Client Register

A register of persons that have interacted with the Australian Tax Office (ATO) and have been issued with an Australian Tax File Number (TFN). The ATO person-level Client Register comprises demographic information such as sex, date of birth, and residential address.

Cash basis

Recording the wage payment in the pay period when the payment was received by the employee.

Commencement and termination dates

Commencement and termination dates associated with each job as reported through Single Touch Payroll.

Employee

Persons who work for a private or public sector employer, where the employee has received payment in the reference week through Single Touch Payroll (STP) enabled software and reported to the Australian Taxation Office (ATO).

Employer

An organisation with an Australian Business Number that provides employment income to one or more people, and reports through the ATO STP system.

Geography

Based on residential address as sourced from either the ATO Client Register or STP data. See also 'Greater Capital City Statistical Area' and 'Statistical area' entries. For more information, see the [Australian Statistical Geography Standard \(ASGS\): Volume 1 – Main Structure and Greater Capital City Statistical Areas \(https://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/871A7FF33DF471FBCA257801000DCD5F?OpenDocument\)](https://www.abs.gov.au/AUSSTATS/abs@.nsf/ProductsbyCatalogue/871A7FF33DF471FBCA257801000DCD5F?OpenDocument).

Greater Capital City Statistical Area

Geographical areas built from Statistical Areas Level 4 (SA4), designed to represent the functional extent of each of the eight State and Territory capital cities. Greater capital city statistical areas (GCCSA) are presented with the 'rest of state' region to cover the whole of Australia without gaps or overlaps. The GCCSA is named according to the city it represents, for example, Greater Sydney. The remainder of the state or territory is named rest of state/territory, for example, Rest of New South Wales (NSW).

Industry

A homogenous grouping of economic activities undertaken to produce goods and services. The [Australian and New Zealand Standard Industrial Classification \(https://www.abs.gov.au\)](https://www.abs.gov.au)

[/ausstats/abs@.nsf/mf/1292.0](https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0)) is used to classify an entity to an industry based on its dominant activity.

Industry division

The broadest grouping of industries within the Australian and New Zealand Standard Industrial Classification. The main purpose of the industry division level is to provide a limited number of categories, which give a broad overall picture of the economy. There are 19 mutually exclusive divisions. For more information see the [Australian and New Zealand Standard Industrial Classification \(https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0\)](https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0).

Industry subdivision

The second broadest grouping of industries within the Australian and New Zealand Statistical Industrial Classification. Industry subdivisions are built up from the industry groups which, in turn, are built up from industry classes. For more information see the [Australian and New Zealand Standard Industrial Classification \(https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0\)](https://www.abs.gov.au/ausstats/abs@.nsf/mf/1292.0).

Job

See payroll job.

Not available (NA)

Statistic is not available. This can be to protect the confidentiality of data providers or to prevent misinterpretation of statistics due to poor quality.

Owner-manager of unincorporated enterprises (OMUE)

A person who operates their own unincorporated enterprise, which does not possess a separate legal identity to that of its owner(s), or engages independently in a profession or trade.

OMUEs can also be referred to as self-employed. Owner managers of unincorporated enterprises are not included in these estimates as they are not in scope of STP-enabled software reporting to the ATO.

Unincorporated enterprises are further defined in the [Standard Economic Sector Classifications of Australia \(https://www.abs.gov.au/ausstats/abs@.nsf/mf/1218.0\)](https://www.abs.gov.au/ausstats/abs@.nsf/mf/1218.0).

Payroll job

A payroll job is a relationship between an employee and their employing enterprise, where the employee is paid in the reference week through STP-enabled payroll or accounting software and reported to the ATO. Where an employee is paid other than weekly, the

established payment pattern is used to identify jobs in weeks outside the payment week.

Single Touch Payroll

The Single Touch Payroll (STP) system sends taxation and superannuation information from a business' STP-enabled payroll or accounting software to the ATO as a business runs its payroll.

Sex

Self reported sex (i.e. male/ female) of a person as reported through the ATO taxation system. Categories other than male or female are not published separately in this release but are included in published totals.

Statistical area level 3

Statistical area level 3 (SA3) regions are designed to provide a regional breakdown of Australia. They generally have a population of between 30,000 and 130,000 people. In regional areas, SA3s represent the area serviced by regional cities that have a population over 20,000 people. In the major cities, SA3s represent the area serviced by a major transport and commercial hub. They often closely align to large urban Local Government Areas (e.g. Gladstone, Geelong). In outer regional and remote areas, SA3s represent areas which are widely recognised as having a distinct identity and similar social and economic characteristics.

Statistical area level 4

Statistical area level 4 (SA4) regions are specifically designed to reflect labour markets within each state and territory within population limits. In regional areas, SA4s tend to have lower populations (100,000 to 300,000), while in metropolitan areas, SA4s tend to have larger populations (300,000 to 500,000).

Type of activity unit

The statistical unit for more significant and diverse businesses in the profiled population. A type of activity unit (TAU) is a constructed unit that can practically group and report on homogenous production activities at the industry sub-division level.

In this publication, the TAU is used to represent employers in the profiled population.

Type of legal organisation

All legal entities on the ABS Business Register are classified according to their type of legal organisation, of which there are three types:

- incorporated private sector entities

- unincorporated private sector entities
- public sector entities.

The type of legal organisation indicates whether a business is part of the private or public sector and the type of ownership structure. For more information see the [Standard Economic Sector Classifications of Australia \(https://www.abs.gov.au/ausstats/abs@.nsf/mf/1218.0\)](https://www.abs.gov.au/ausstats/abs@.nsf/mf/1218.0).

Wages

Wages include salary payments and allowances, labour hire payments and foreign income, as well as the value of payments in kind (where a fringe benefit amount is recorded). Bonuses are typically included where they are reported in the same field as normal payments. Wages are calculated as gross amounts, prior to taxation and deductions.

Wages exclude payments to employee's superannuation as well as severance and termination payments. Wages are only available for payroll jobs and do not include income from own businesses or other sources.

Abbreviations

ABN	Australian Business Number
ABR	Australian Business Register
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASGS	Australian Statistical Geography Standard
ATO	Australian Taxation Office
FBT	fringe benefits tax
NA	Not Available
pts	Index points
SA3	Statistical Area Level 3
SA4	Statistical Area Level 4
STP	Single Touch Payroll
TFN	Tax File Number